Academic Program Review

ACADEMIC YEAR	2014	☐ Basic Skills ☐ Transfer ☒ Career Technical Education (CTE)
PROGRAM	EMT Paramedic Program	
DEPARTMENT	Nursing and Allied Health	
DIVISION	Health and Science	
SUBMITTER	Rick Goldsberry RN, BSN	

I. INSTITUTIONAL GOALS

INSTITUTIONAL GOAL **1**	**INSTITUTIONAL MISSION AND EFFECTIVENESS** – The College will maintain programs and services that focus on the mission of the College supported by data-driven assessments to measure student learning and student success.
INSTITUTIONAL GOAL **2**	**STUDENT LEARNING PROGRAMS AND SERVICES** – The College will maintain instructional programs and services which support student success and the attainment of student educational goals.
INSTITUTIONAL GOAL **3**	**RESOURCES** – The College will develop and manage human, technological, physical, and financial resources to effectively support the College mission and the campus learning environment.
INSTITUTIONAL GOAL **4**	**LEADERSHIP AND GOVERNANCE** – The Board of Trustees and the Superintendent/President will establish policies that assure the quality, integrity, and effectiveness of student learning programs and services, and the financial stability of the institution.

II. PROGRAM GOALS

A. PAST – EVALUATION OF PREVIOUS CYCLE OBJECTIVES/PROGRAM GOALS (SET IN PREVIOUS YEAR)

List your previous objectives/goals and associated Institutional Goals. All program goals must address at least one of the institutional goals.

PAST PROGRAM GOALS (Describe past program goals.)	INSTITUTIONAL GOAL(S) (Check all that apply.)

1	PAST PROGRAM GOAL #1	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Seek grant opportunities in our local community to provide additional funds to improve the EMS programs and to advance the technology and equipment used in instruction and clinical practice.	☐ 1 ☐ 2 ☒ 3 ☐ 4
	☐ Met ☒ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** In previous years we have received grant money from the Workforce Investment Board which allowed us to update much needed equipment. Currently we have nearly everything that we need to provide exceptional learning experiences for our students. Because of community support we will be moving to a new EMS training facility in April or May of 2014. This will further enhance our training program. We will have our supplies and equipment in the same location as our classrooms and Skills labs and will not be competing with the Nursing Dept for their storage space and Lab space. This year we were allotted categorical funds for the purchase of additional equipment which will be used in the new training facility. At present, there are no grant funds available to us however we will continue to seek them as they become available.	

2	PAST PROGRAM GOAL #2	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Continue to track, monitor, and improve on the first time pass rate for national registry exams for EMS programs. This is how we externally validate student success.	☒ 1 ☒ 2 ☐ 3 ☐ 4
	☐ Met ☒ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** IVC's Paramedic program continues to exceed the national results. IVC's first time pass rate averages 80% for the last 4 years, while the national first time pass rate is 71% for the same period. IVC's overall pass rate for all attempts is 93% while the national overall result is 87%. In the last year we have implemented online testing for all tests to for all quizzes and major tests to get students better prepared for the National Registry licensure exam and we have purchased a highly recommended web-based service for our students to help them prepare for the NREMT exam as well. This year we are using new methods in the classroom to help all students be better prepared for classes. One is the learning team concept where the class is divided into two groups that are carefully divided to include students who are struggling and those who are exceling equally on each team. Another method being used this year is the "Immediate Action Drills" where students are given unanticipated emergency situations to make quick decisions about. This will enhance critical thinking under pressure and should have positive consequences when students enter the clinical and field portions of their training. We will continue to work on improving the first time pass rate for all classes into the future.	

3	PAST PROGRAM GOAL #3	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Actively participate in the planning of the new CTE building, develop a relocation plan, and implementing both plans as the project progresses	☐ 1 ☐ 2 ☐ 3 ☐ 4
	☐ Met ☒ Partially Met ☐ Not Met	
	Provide detail on any improvements/effectiveness and detail status on those not fully met: When the CTE building is completed in April-May of this year we will be ready to move into the building. We have provided input as to our needs and expectations. We have a plan to move our supplies and equipment into the new building during "spring break" so that there will be as smooth as possible a transition for our students. Once we have made the move, this goal will be met.	

Comments:

B. PRESENT – DATA ANALYSIS AND PROGRAM HEALTH

1. Summarize and analyze all disaggregated data by day, evening, gender, ethnicity, and distance education regarding enrollments, fill rates, productivity, completion, success, retention, persistence, and transfer (complete a, b, & c). ***Attach graphs or trend data***.

   a. Discuss and chart the trends in enrollment and fill rate for each program by day and evening at the program level.

      Application numbers are down across Southern California for the past several years , including the rate at Imperial Valley College. There may be several factors causing this to happen:

      1. Increase in the numbers of paramedic training programs regionally. San Diego County now has 5 training programs with some teaching 2 or even 3 classes anually.
      2 . Paramedics have a very high responsibility level and relatively low pay for the responsibility they are required to take on.
      3. The difficulty of paramedic training can be a factor for many students.

   b. What are the trends in productivity? (WSCH/FTEF) The goal is 525 as per state guidelines. A low number means that we are below target levels for productivity. For example, in a small class that has a mandated cap of 15 students, the fill rate may be 100% but the productivity number (WSCH/FTEF) will be very low. A class with a cap of 40 students with a 100% fill rate will have a productivity number close to or above 525.

      While our WSCH/FTEF productivity is substantially lower than it should be currently, we feel that an increase in enrollment could reverse the situation that we are now in. Marketing our program to paramedic services in the surrounding counties as well as our own county, will improve our numbers of applications. We are limited in the number of students that we can accept because of the availability of qualified field preceptors right now. Due to recent labor issues at the local ambulance company, nearly all of the veteran paramedic preceptor were terminated and inexperienced paramedics were hired in the place. It will take 1-2 years for the paramedics to become qualified as preceptors. This will limit class size for at least one year. State law requires that we have preceptors available for our students to complete their field internships.

   c. Discuss and chart the success and retention rates by day, evening (extended day), and online classes in each program and identify gaps.

      Our succes and retention rates have been high for the past 3 years with an average 96% success rate and 97% retention. It

should be noted that with the very small class size that we are currently experiencing, loss of any student has a large impact on the percentages.

d. Discuss and chart the success and retention rates in each program and identify gaps for five ethnic groups. (African-American, White, all Hispanics, Other, Unknown).

Students who described themselves as Hispanic, Mexican American or Other Hispanic in ethnicity number 108 the success rate of thes individuals was 92.3%. The rentention rate for this same group of students was 94%. There were no African American applicants to our program. Students who described themselvesas White number 22 and had a 100% rentetion rate for the period 2010-2013. The number of students who did not report their ethnicity was 71. These students had 99% success in our program and 99% retention rate.

e. Discuss the trends in the number of degrees or certificates awarded, if applicable. (You may be able to expand more about this in B.3 below.)

While the number of associate degrees awarded is low, we are encouraging our students to pursue their degree as a way to improve employability. Most of our students are already employed in an EMS or Fire Service career as EMTs or Fire Fighters. they seek paramedic training because it increases their wages and allows them to provide a higher level of care to patients than their basic EMT training allows. Those who are not already employed in these careers are earning their paramedic certificate because many agencies and particularly fire departments, give strong preference to applicants who have already attended paramedic training. Because of this the cerificate is sought to increase the chance of obtaining employment. Some students have come back to complete their EMS Associate degrees several years later.

f. What program changes, if any, will you recommend that you expect would have a positive effect on your students in your program, if applicable?

We are now moving to evidence-based patient care and so the teaching of how to analyze research studies and change paramedic practice to meet the science is relatively new to the paramedic field. Our medical director has been consistently in favor of evidence-based practice in our county and has encouraged students and instructors to discuss the science behind our practice of paramedicine. Our accrediting agency is also moving toward mandatory evidence-based practice. This year we are changing the way teach airway management situations and will begin requiring an increase in the number of documented

successful airway management contacts. We are doing this because our accrediting agency will require it in 2016, but also because airway management is one of our weakest areas, historically, on the licensure examinations our students must pass to be successfully licensed.

2. Summarize revisions, additions, deletions, or alternate delivery methods to courses and/or program based on the last program review.

   We are in the constantly changing field of medicine which requires that our program evolve with medicine as changes occur. The Program Director looking for innovative methods to enhance student learning and retention of materials being taught. in 2013 we began using electronic testing with our Blackboard learning system at IVC. The students have reported that they felt this helped them get used to taking tests in a new way they were not used to and they felt that this would improve their chances of being successful on their National Registry licensure exams. Additionally, course materials such as lecture slides, and a large amount of other helpful materials are readily available to students both on Blackboard, and on a website the program director personally built and maintains for the students. Because each county in California has its own policies and procedures that allow paramedic to do various skills that are different from our county, materials are included that will help students that come from other counties prepare for procedures that might not be done by paramedics in our county. We need to continue to track, monitor, and improve on the first-attempt pass rate for national registry Cognitive exams for EMS programs to benchmark student success with an external measurement.

3. Evaluate the program's viability by addressing program completion, size (FTES), projections (growing/stable/declining), and quality of outcomes. For CTE programs, also include labor market projections, placement, and performance on external testing/exams (i.e. ASE, NABCEP) and industry-recognized credentials, placement, and performance on external testing or exams (NCLEX, ASC, NAP).

   VI. Labor Market Demand

   The Emergency Medical Services program at Imperial Valley College meets a documented labor market demand. Employment trends for this field are derived from a variety of sources. These are listed below:

   A. Employment Trends (Employment Development Department):

Occupation	TOP Code	SOC Code	2008	Average Job Openings per Year
Emergency Medical Technicians and Paramedics	1251.00	292041	80	3*

*Same data as 2012. No updates from State Employment Development

Occupational Employment Projections 2008-2018

Imperial County
http://www.labormarketinfo.edd.ca.gov/CommColleges

B. Employment Trends (Faculty Assessment):

1. While the State data might be accurate for 1 type of job (Ambulance service), it is incorrect in for other jobs such as the fire service.
2. Our program generally has 30-50% of its students from the surrounding counties (Riverside, San Diego and Yuma). It is not fair to use the fact that we have low job opportunities to decide on the program when for the past 5 years ALL of our program graduates have been employed and generally in an EMS position where their training has benefitted their community. In fact, ALL students residing in Imperial County have been employed locally at various agencies (EMS, Fire service, etc.).
3. Our paramedic program is the only program to train paramedics for Imperial County agencies that are providing paramedic services. Without our program, our local paramedic candidates would have to travel more than 120 miles to attend training creating extensive hardships for the students and their families. There is a chance that not having a local paramedic program could create a shortage of paramedics (That is the reason why the IVC Paramedic Program was created) or bring paramedics from outside the county eliminating local jobs for Imperial County residents.
4. Many paramedic program applicants choose to become paramedics for career advancement opportunities (more training, increased pay); Others choose to become paramedics because it gives them the advantage of being able to provide a much higher level of care to the ill or injured that they are responsible to treat than the basic EMT training. Without the ability to to attend a paramedic program locally, our local level of care would suffer because our local EMS providers would not be as likely to get educated at the paramedic level of care.
5. The State's employment trends does not take into account the fact that attrition for EMS jobs fluctuates greatly from year to year for several reasons, including the current labor dispute at the local ambulance service, a major employer of paramedics in this county. Nearly all of the employees were terminated creating a need for additional paramedics. There is also attrition because of relatively low pay and working conditions at Imperial County Fire Departments compared to departments in larger cities on the west coast.
6. Most fire departments will give priority to applicants for employment who are already trained as paramedics versus those that are trained at a basic EMT level. Many of our paramedic candidates are EMT trained and seeking a job in the fire service and would have a better chance of successfully being employed if they had the additional paramedic training.

C. FUTURE – LIST OF "SMART" (SPECIFIC MEASURABLE ATTAINABLE RELEVANT TIME-LIMITED) PROGRAM OBJECTIVES FOR NEXT ACADEMIC YEAR TO ADDRESS PROGRAM IMPROVEMENT, GROWTH, OR UNMET NEEDS/GOALS. ALL PROGRAM GOALS MUST ADDRESS AT LEAST ONE OF THE INSTITUTIONAL GOALS.

FUTURE PROGRAM GOALS (Describe future program goals. List in order of budget priority.)				INSTITUTIONAL GOAL(S) (Check all that apply.)
1	**FUTURE PROGRAM GOAL #1** Budget Priority #1			**INSTITUTIONAL GOAL(S)**
Identify Goal: Improve graduate performance on first attempt on National Registry Cognitive Exam				☒ 1 ☒ 2 ☐ 3 ☐ 4
Objective: 1.1 Develop tracking system to monitor and benchmark student performance 1.2 Implement teaching/learning strategies to improve performance on National Registry Cognitive exam.				
Task(s): 1. Implement and evaluate the success of our Learning Teams to enhance learning for all students. (With the use of Learning Teams we will have the students who are excelling helping the students not doing as well to develop better study habits). 2. Implement Immediate Action Drills(We are implementing a new strategy to better prepare students for their filed internships that helps develop their psychomotor skills performance and critical thinking skills.) 3. Utilize test preparation programming (EMSTesting.com) to validate test questions and computer adaptive tests. (we can enhance our student's chances for a first-attempt pass on the NREMT licensure exam.) The cost will vary from $1200 foir a class of 12 students to $1700 for a class of 20 students.				
Timeline: Spring Semester 2014				
EXPENSE TYPE	**FUNDING TYPE**		**RESOURCE PLAN** (Check all that apply.)	**BUDGET REQUEST**
☐ One-Time ☒ Recurring	☐ Categorical Specify:	☒ General Fund	☐ Facilities ☐ Marketing ☒ Technology ☐ Professional Development ☐ Staffing	$1700.00

2	FUTURE PROGRAM GOAL #2 Budget Priority #2			INSTITUTIONAL GOAL(S)
Identify Goal: Increase student computer assisted learning access				☐ 1 ☒ 2 ☒ 3 ☐ 4
Objective: 2.1 Seek funding for additional computer lab in new training facility				
Task(s): 2.1.1 ID potential sources of funds 2.1.2 Apply for funding as appropriate				
Timeline: 2-3 years				
EXPENSE TYPE	**FUNDING TYPE**		**RESOURCE PLAN** (Check all that apply.)	**BUDGET REQUEST**
☒ One-Time ☐ Recurring	☒ Categorical Specify: Grant or Bond funding	☐ General Fund	☐ Facilities ☐ Marketing ☒ Technology ☐ Professional Development ☐ Staffing	$40,000

3	FUTURE PROGRAM GOAL #3 Budget Priority #3			INSTITUTIONAL GOAL(S)
Identify Goal: Enhance Student learning via realistic job related student experience				☐ 1 ☒ 2 ☒ 3 ☐ 4
Objective: 3.1 Seek funding to purchase ambulance for new facility (to enhance our student simulation practice we will need an ambulance to simulate calls more realistically).				
Task(s): 3.1.1 Explore sources for funding/donation of ambulance 3.1.2 Apply for funding as appropriate 3.1.3 Procure ambulance				
Timeline: 2-3 years				
EXPENSE TYPE	**FUNDING TYPE**		**RESOURCE PLAN** (Check all that apply.)	**BUDGET REQUEST**
☒ One-Time ☐ Recurring	☒ Categorical Specify: Grant or Bond	☐ General Fund	☐ Facilities ☐ Marketing ☒ Technology ☐ Professional Development ☐ Staffing	$25,000

TOTAL BUDGET REQUEST	$66,700

1. How will your enhanced budget request improve student success?

   A. By utilizing test preparation programming (EMSTesting.com) which include validated test questions and computer adaptive tests, we can enhance our student's chances for a first-attempt pass on the NREMT licensure exam. The cost will vary from $1200 for a class of 12 students to $1700 for a class of 20 students.
   B. For student to have easy and ready access to the school's learning system, to decrease class time going to and from current computer facilities.
   C. To enhance our student simulation practice we will need an ambulance to simulate calls more realistically.

Comments:

III. INSTITUTIONAL STUDENT LEARNING OUTCOMES (ISLOs)

ISLO 1	COMMUNICATION SKILLS
ISLO 2	CRITICAL THINKING SKILLS
ISLO 3	PERSONAL RESPONSIBILITY
ISLO 4	INFORMATION LITERACY
ISLO 5	GLOBAL AWARENESS

IV. PROGRAM LEARNING OUTCOMES (PLOs)

PROGRAM LEARNING OUTCOMES (Describe learning outcomes.)		**ISLO(S)** [Link PLO to appropriate ISLO(s).]
PLO 1	**PROGRAM LEARNING OUTCOME #1**	**ISLO(S)**
	Identify Program Outcome: Students meet or exceed pass rates set for national(Cognitive) licensing exam (National Registry) within 4 months of program completion and as validated by NREMT official reporting.	☐ ISLO 1 ☒ ISLO 2 ☒ ISLO 3 ☒ ISLO 4 ☒ ISLO 5
	Measurable Outcome Summary: The first attempt pass rate for students attempting the NREMT examination for the period 2010 to 2013 was 80% and overall pass rate on all attempts was 93%. While the NREMT reports nation first attempt pass rate was 71% and overall pass rate on all attempts was 87% for the same time frame.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:**	

PLO 2	PROGRAM LEARNING OUTCOME #2	ISLO(S)
	Identify Program Outcome: Students meet or exceed pass rates set for national licensing skills exam (National Registry) prior to EMTP 225 as determined by NREMTP official scoring/reporting.	☐ ISLO 1 ☒ ISLO 2 ☒ ISLO 3 ☒ ISLO 4 ☒ ISLO 5
	Measurable Outcome Summary: Our NREMT Skills test results were 92% first time pass rate during the period 2010-2013, subsequently, students had 100% pass rate with two students needing to retake one section each of the tests.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:**	

PLO 3	PROGRAM LEARNING OUTCOME #3	ISLO(S)
	Identify Program Outcome: Students will demonstrate skills needed to meet the minimal certification standards for BLS, BLS Instructor, ACLS and PALS prior to EMTP 225 as determined by a valid AHA card designating BLS provider, BLS instructor, ACLS and PALS provider proficiency.	☐ ISLO 1 ☒ ISLO 2 ☒ ISLO 3 ☒ ISLO 4 ☒ ISLO 5
	Measurable Outcome Summary: 100% of students were certified as BLS providers, BLS instructors ACLS, and PALS providers.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:**	

***** ATTACH PLO/SLO GRID *****

Student Learn Outcomes

Subject	#	Course Title	Units	S 11 – Crs SLOs	F 11 Crs SLOs	S 12 Crs SLOs	F 12 Crs SLOs	S 13 – Crs SLOs	F 13 Crs SLOs
EMTP	200	Paramedic Didactic 1	9	1,2,3,4,5, 6,7,8,9		1,2,3,4,5		Need 6,7,8,9	
EMTP	210	Paramedic Didactic 2	9	1,2,3,4,5, 6,7,8,9		1,2,3,4,5		Need 6,7,8,9	
EMTP	215	Paramedic Didactic 3	3	1,2,3,4, 5 summer		1,2,3,4,5 summer		1,2,3,4,5 summer	
EMTP	225	Paramedic Clinical 1	3.5		1,2,3		done in 2010 & 2011		1,2,3
EMTP	235	Paramedic Field 1	6.5		1,2,3,4,5,6		done in 2010 & 2011		1,2,3,45,6
EMTP	245	Paramedic Field	5.5		1,2,3,4,5,6		done in 2010 & 2011		1,2,3,4,5,6

Program Outcomes and Course Alignment Grid for Imperial Valley College

Program: Emergency Medical Services Certificate, Degree, & Program Completed on: Dec 31, 2011

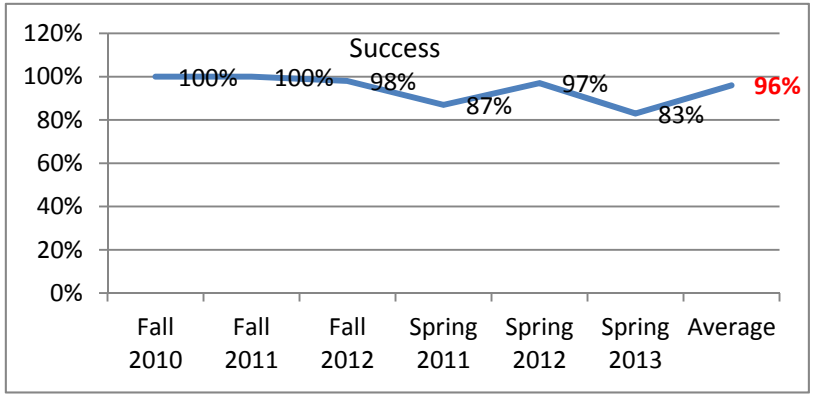
Prepared by : Justina Aguirre and Rick Goldsberry

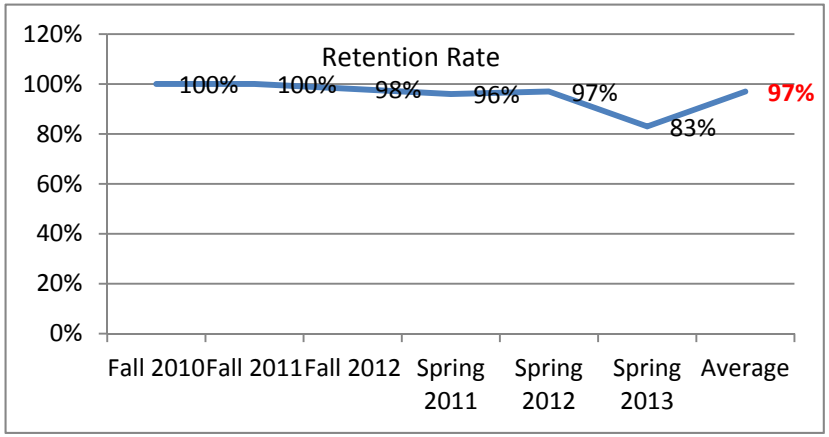
Course	Communication	Critical Thinking	Personal Responsibility	Information Literacy	Global Awareness	# of Outcomes identified so far for course
BUS 132	3	3	1	3	1	3
BUS 136	3	3	3	3	3	3
EMTP 200	3	3	3	3	3	3
EMTP 210	3	3	3	3	3	3
EMTP 215	3	3	3	3	3	3
EMTP 225	3	3	3	2	3	3
EMTP 235	3	3	3	2	3	3
EMTP 245	3	3	3	2	3	3

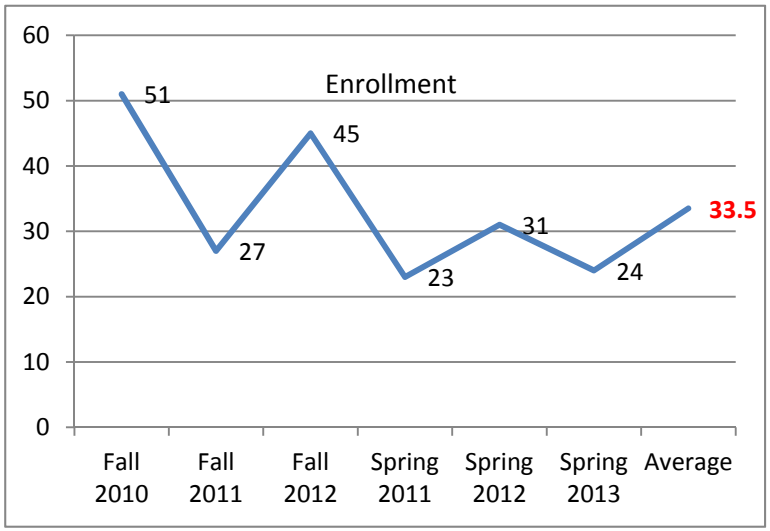
**FIVE POINT KEY: Using this key, to receive a 3 or 4 the ISLO needs to be measured through the outcome and assessment.

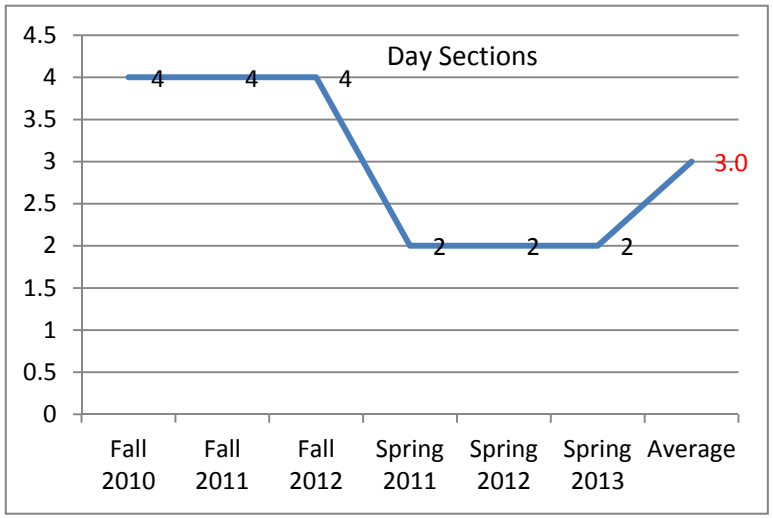
4= This is a STRONG focus of the course. Students are tested on it or must otherwise demonstrate their competence in this area.
3= This is a focus of the course that will be assessed.
2= This is a focus of the course, but is NOT assessed.
1= This is briefly introduced in the course, but not assessed.
0= This is not an area touched on in the course.

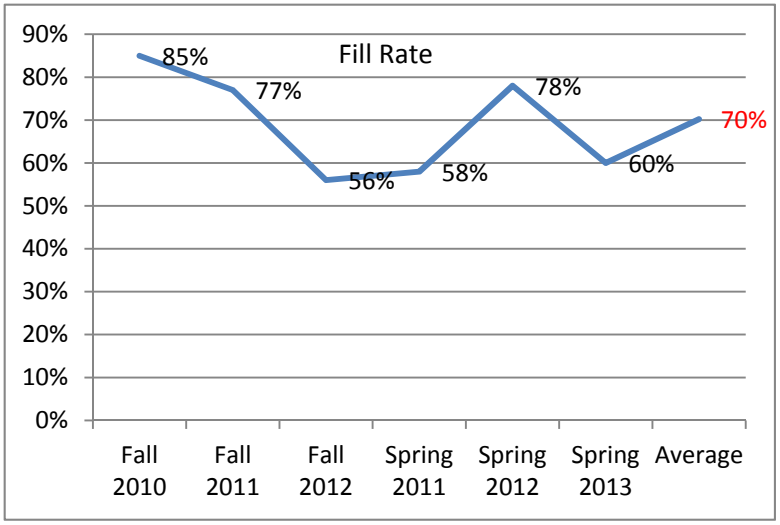
Spring 2014 EMT-Paramedic Program Review



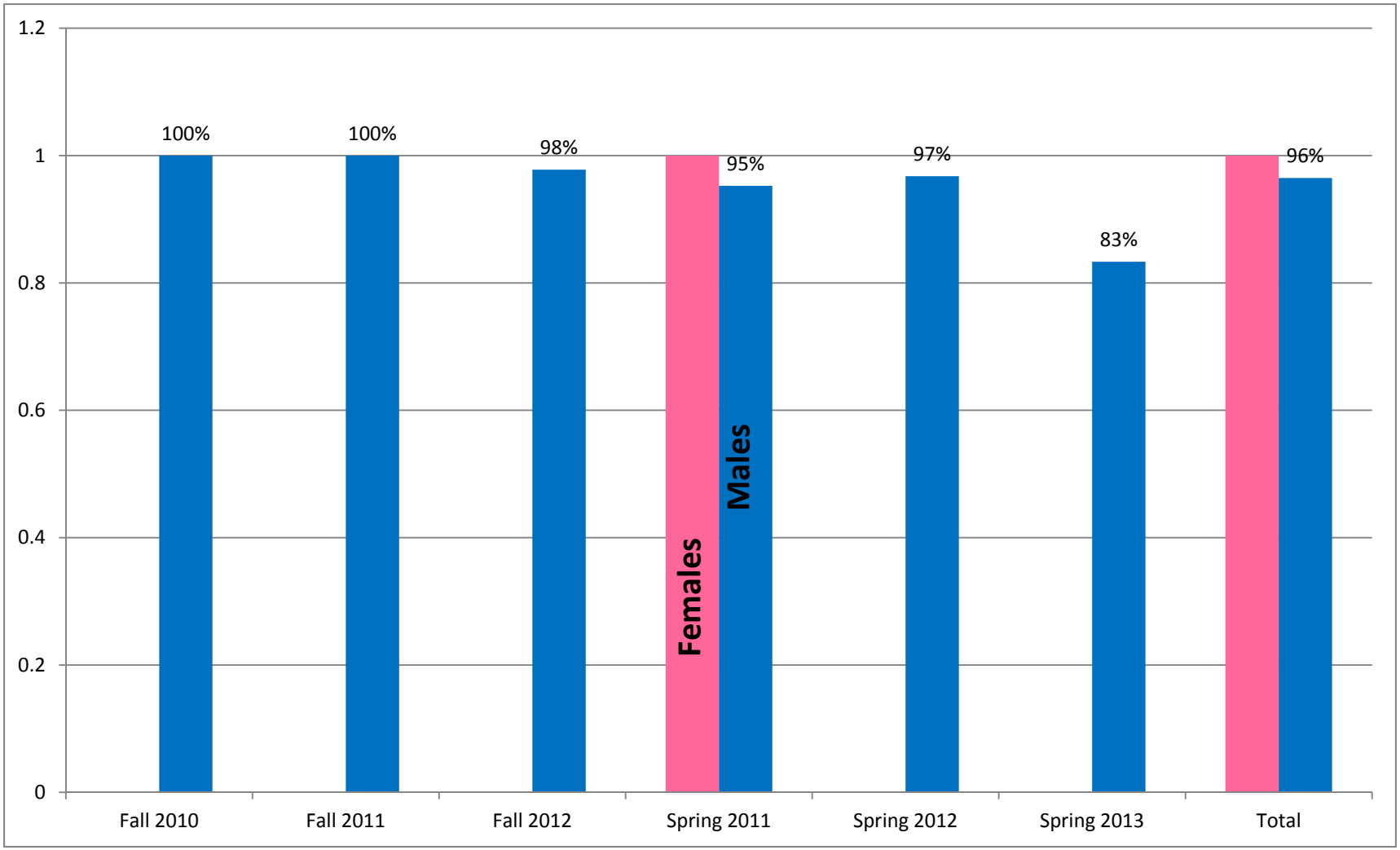


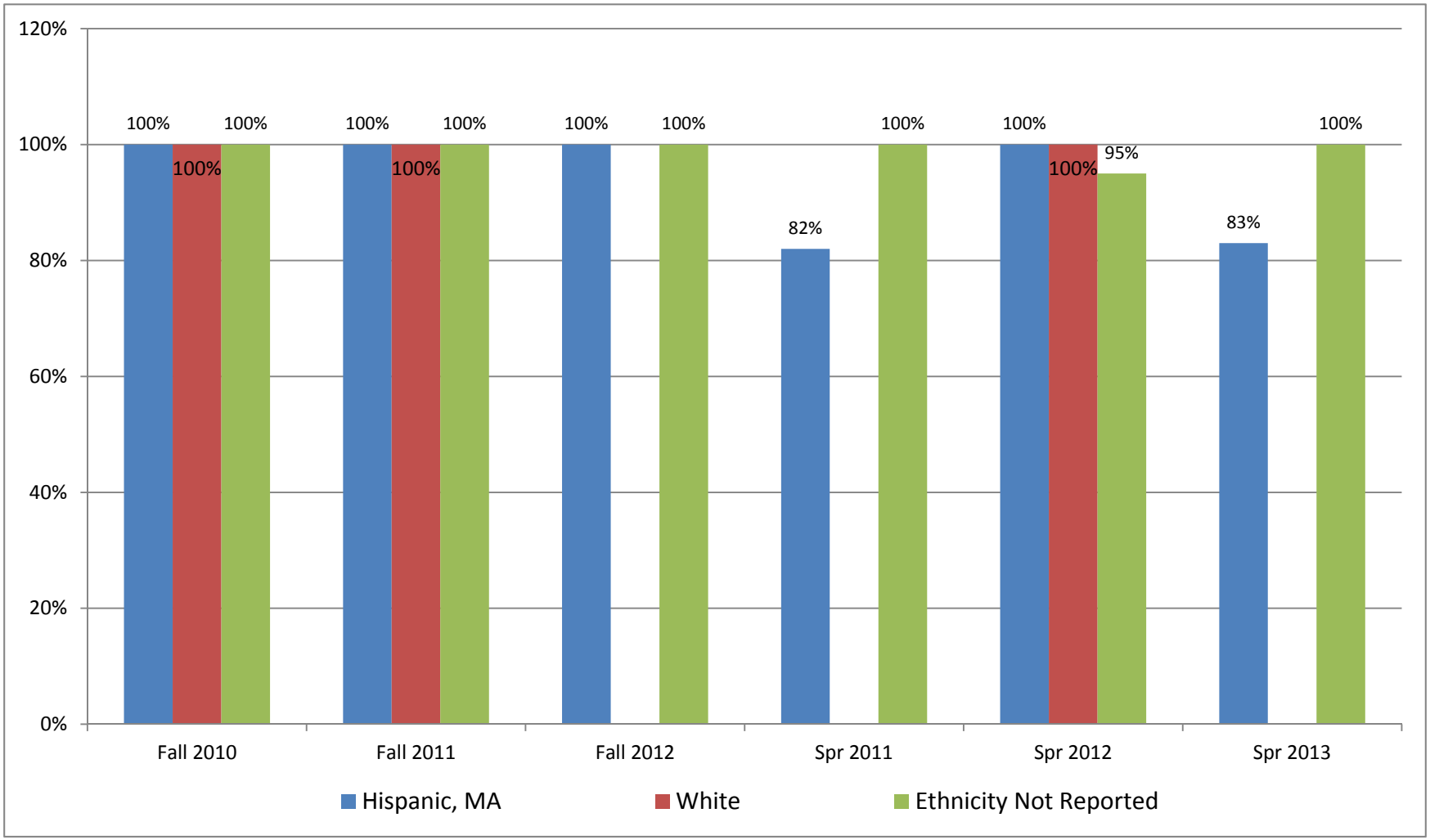

Enrollment
60
50
40
30
20
10
0
51
27
45
23
31
24
33.5
Fall 2010
Fall 2011
Fall 2012
Spring 2011
Spring 2012
Spring 2013
Average


Day Sections
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
4
4
4
2
2
2
3.0
Fall 2010
Fall 2011
Fall 2012
Spring 2011
Spring 2012
Spring 2013
Average

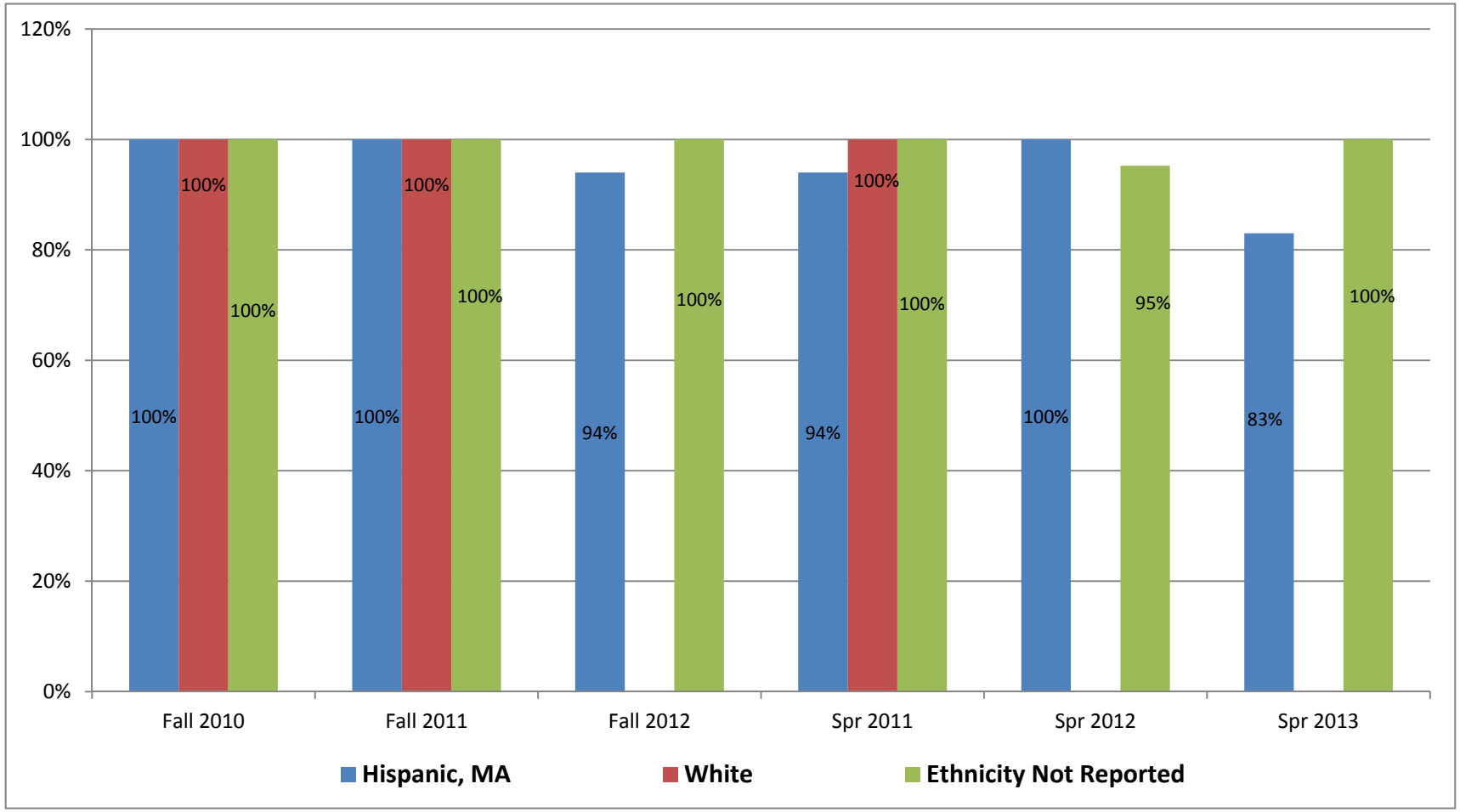

Fill Rate
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
85%
77%
56%
58%
78%
60%
70%
Fall 2010
Fall 2011
Fall 2012
Spring 2011
Spring 2012
Spring 2013
Average

Success Rate by Gender

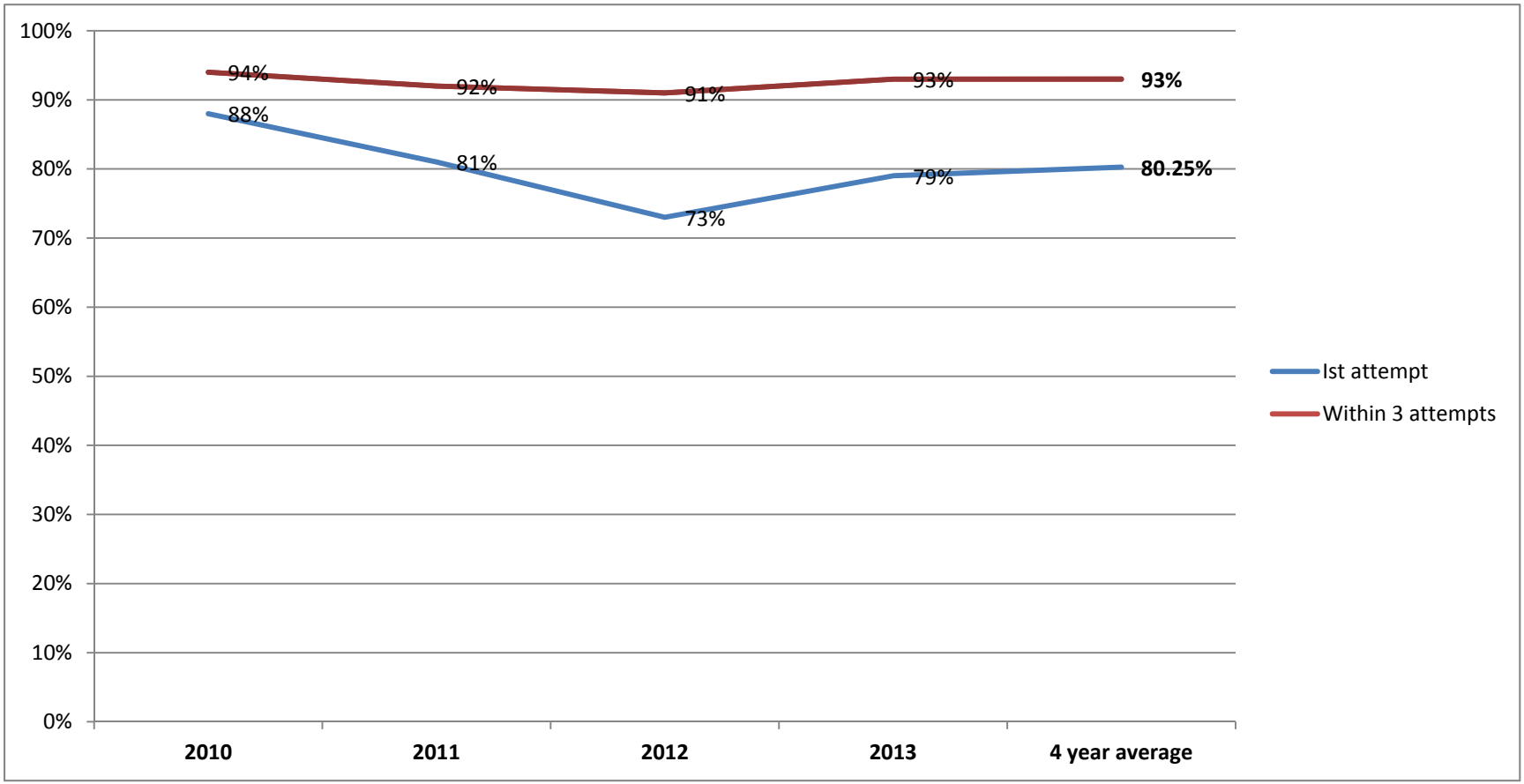



Success by Ethnicity
120%
100%
80%
60%
40%
20%
0%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
95%
82%
83%
100%
Fall 2010
Fall 2011
Fall 2012
Spr 2011
Spr 2012
Spr 2013
Hispanic, MA
White
Ethnicity Not Reported

Retention by Ethnicity



NREMT Cognitive Exam Pass Rates 2010-2013



Enrollment, Success & Retention				
Term	Program	Day Enrollment	Day Success Rate	Day Retention Rate
Fall 2010	EMTP	51	100%	100%
Fall 2011	EMTP	27	100%	100%
Fall 2012	EMTP	45	98%	98%
Spring 2011	EMTP	23	87%	96%
Spring 2012	EMTP	31	97%	97%
Spring 2013	EMTP	24	83%	83%
Average		**33.5**	**96%**	**97%**

Term	Program	Day Sections	Day Fill	Day Enroll	Day Mass Cap
Fall 2010	EMTP	4	85%	51	60
Fall 2011	EMTP	4	77%	27	35
Fall 2012	EMTP	4	56%	45	80
Spring 2011	EMTP	2	58%	23	40
Spring 2012	EMTP	2	78%	31	40
Spring 2013	EMTP	2	60%	24	40
Average		**3.0**	**70%**	**33.5**	**49.2**
Fall '10 - '12 Change		100%	66%	88%	133%
Spring '11 - '13 Change		50%	75%	85%	114%